

acters that effectively set off *Psilactis* from *Machaeranthera*, either as a distinct genus or as a subgeneric taxon.

On morphological grounds, *Machaeranthera parviflora* should be placed in series *Psilactis* also; it has the same chromosome number ($n=5$; Jackson 5241, KANU) as its other close relatives, *M. arida*, *M. coulteri*, *M. crispa*, and *M. arizonica*.

UNIVERSITY OF KANSAS, LAWRENCE

AND TEXAS WESTERN UNIVERSITY, EL PASO

LITERATURE CITED

- TURNER, B. L. and D. HORNE. 1964. Taxonomy of *Machaeranthera* sect. *Psilactis* (Compositae-Astereae). *Brittonia* 16:316-331.
JACKSON, R. C. 1962. Intergeneric hybridization between *Psilactis* and *Machaeranthera*. *Amer. Jour. Bot.* 49:676. (Abstract).

ADDITIONS TO THE VASCULAR FLORA OF OKLAHOMA — II

It is a tendency for some botanists to think of the vascular flora of our area as rather thoroughly collected until for some reason they attempt to delineate the distribution of some species. Often when the specimens housed in our herbaria are examined, two conditions are encountered. (1) Although the species is often a rather common one, only a few specimens are available. (2) Again, sometimes there may be several folders of specimens, but all from a few locations. The interest of more and more of our botanists today does not take them to the field, yet much general collecting is still to be done. I feel that the species discussed in this brief paper offer some support to these contentions. Although they are thought not to have been previously reported for the state, they occur in rather common habitats (old fields, rocky roadsides, sand dunes, etc.) and probably have been members of our flora for a long time. We wish to express our thanks to Betty Weisenhunt, who helped with the species of *Schrankia*. All specimens cited were collected by John and Constance Taylor unless otherwise indicated, and are presently located at the Bebb Herbarium, Norman.

Ophioglossum crotalophoroides Walt. The genus *Ophioglossum* has been known in our flora by the one species *O. engelmannii* Prantl for over 30 years. Now we have *O. cro-*

talophoroides as No. 3322, collected March 15, 1966 from a sandy old field just west of Durant city limits. This species differs in that it fruits about two to three weeks earlier in this area, is much smaller, is found mainly in sandy soils, the rhizome is almost spherical or bulb shaped, and in the older specimens, the old leaf bases remain to form a cylindrical black collar on their top. It has been reported from a number of counties in Texas: Newton (Reverchon, 1903); Bastrop, Hardin, and Harris (Correll, 1956); and from Llano in the Edwards Plateau (Ridgway and Walne, 1965). One specimen of this species was located in the Bebb Herbarium from Faulkner Co., Arkansas by C. M. Moore, No. 5417.

Schrankia roemeriana (Scheele) Blankenship. In Texas this species of sensitive briar is known from the Red River south through the south central part of the state. Turner (1959) listed it as occurring in Fannin, Grayson, and Clay counties just south of the Red River, thus its presence in Oklahoma might have been expected. This species may be differentiated from *S. uncinata* by the lack of raised veins on the lower surface of the leaflets and the flattened seed pod. It usually occurs on soils derived from limestone or clay, while *S. uncinata* is usually found growing in sandy soil. Our specimen, No. 3355, is from along a county road from a limestone outcrop, collected 4 miles NE of Bennington in Bryan Co. on June 5, 1966. This species may occur over much of the southern half of the state where clay and limey soil are found and should be looked for in the Arbuckle Mountains.

Zanthoxylum hirsutum Buckley. This name is taken from Shinnars (1958) who gives the following synonymy. *Z. carolinianum* var. *fruticosum* (Gray) S. Watson, *Fagara fruticosa* (Gray) Small, *F. clava-herculis* var. *fruticosa* (Gray) Sargent. The Texas distribution of *Z. hirsutum* is given as from the northcentral part of Texas south and westward to the Transpecos. We have this species from Oklahoma as No. 2095, rocky limestone hill, 11 miles W of Marietta, Love County; No. 3427, limestone bluff above the Red

River floodplain, 8 miles W of Waurika, Jefferson County; No. 3427B, sand dune area 17 miles SE of Randlett, Cotton County; and No. 3442, 1 mile S of Davidson, on sand dunes, Tillman County, which is our westernmost location. In our area it takes a low growth form with fruiting specimens 4-5 feet tall being common. Occasionally a height of 10 to 15 feet is attained, but these are usually branched at or near the ground. *Zanthoxylum hirsutum* differs from *Z. clava-herculis* (under which it is sometimes placed as a variety) by smaller general growth form, leaves, and leaflets, and a smaller axillary inflorescence. Texas authors seem to disagree as to the exact status of this species. Vines (1960) lists *Z. clava-herculis* L. var. *fruticosum* Gray and gives essentially the same range as that listed by Shinnars (1958) for *Z. hirsutum*. Gould (1962) lists *Z. clava-herculis* var. *fruticosum* (Gray) Wats. based on *Fagara fruticosa* (Gray) Small and gives a distribution including most of Texas except the high plains portion of the panhandle. He also lists a *Z. hirsutum* Buckl. from the coastal prairie and south Texas plains.

Epilobium glandulosum Lehm. var. *adenocaulon* (Haussk) Fern. To the best of our knowledge, the genus *Epilobium* has been known in the Oklahoma flora by one species (*E. coloratum*) and one collection (E. L. Little, No. 3996) for almost 30 years (Hopkins, 1938). We now have *E. glandulosum* var. *adenocaulon* as No. 2520 from a small spring in a branch of Tessequite Canyon, 6 miles S of Kenton, Cimarron Co., Oklahoma. This is a wide ranging species in North America, occurring from Alaska east to Newfoundland, south to West Virginia and westward to California. It was a mild surprise to find that similar material I had collected in the interior of Alaska in the summer of 1965 was considered to belong to the same species. Rogers (1953) lists this species (as *E. adenocaulon* Haussk.) as common in the Colorado portion of the Black Mesa, which suggested the possibility of its occurring in Oklahoma.

R. JOHN TAYLOR AND CONSTANCE TAYLOR
SOUTHEASTERN STATE COLLEGE
DURANT, OKLAHOMA

LITERATURE CITED

- CORRELL, D. S. 1956. Ferns and Fern Allies of Texas. Renner, Texas: Texas Research Foundation.
- GOULD, F. W. 1962. Texas Plants — A checklist and ecological summary. Texas Agr. Exp. Sta. MP-585.
- HOPKINS, M. 1938. Notes from the Herbarium of the University of Oklahoma. *Rhodora* 40:433.
- REVERCHON, J. 1903. The Fern Flora of Texas. *Fern Bull.* 11:33-38.
- RIDGWAY, J. and P. WALNE. 1965. *Ophioglossum Crotalophoroides* Walt. on Enchanted Rock, Llano County, Texas. *Southwestern Naturalist* 10(2):143.
- ROGERS, C. M. 1953. The vegetation of the Mesa de Maya Region of Colorado, New Mexico, and Oklahoma. *Lloydia* 16(4):257-290.
- SHINNERS, L. H. 1958. Spring flora of the Dallas-Ft. Worth area, Texas. Publ. by Lloyd H. Shinnners, Dallas.
- TURNER, B. L. 1959. The Legumes of Texas. Austin: Univ. Texas Press.
- VINES, R. A. 1960. Trees, Shrubs, and Woody Vines of the Southwest. Austin: Univ. Tex. Press.

SAXIFRAGA AIZOÖN IN NEW HAMPSHIRE*

Saxifraga Aizoön Jacq. is an arctic-montane, amphi-Atlantic rock plant of Europe, Iceland, Greenland and North America¹. In eastern North America the species, represented by var. *neogaea* Butters, ranges southward into cold localities of Nova Scotia, New Brunswick, Maine (Mt. Katahdin), Vermont, and northern New York². The plant has not been reported previously from New Hampshire³.

On 20 July 1939 I found a colony of *Saxifraga Aizoön*, numbering about 80 flowering plants, in a deep chasm cut by glacial action into the flank of Mt. Washington, Coös County, New Hampshire. Most of the plants grew in a nearly horizontal fissure in a vertical rock wall of impres-

¹HULTEN, E. 1958. The amphi-Atlantic plants and their phytogeographic connections. *Kungl. Svensk. Vetensk. Handl.* IV. 7: 1-340.

²FERNALD, M. L. 1950. *Gray's Manual of Botany*, Ed. 8. American Book Co., New York. 1632 p.

³PEASE, A. S. 1964. *A Flora of Northern New Hampshire*. New England Botanical Club, Inc. v + 278 p.

*The author appreciated the help of John Beaman, Ph.D., Associate Professor and Curator of the Beal-Darlington Herbarium in the preparation of this article.